

REMARKS

Claims 1-20 were presented for examination. Claims 1-10 were rejected. Claims 11-13 were objected to. Claims 14-20 were allowed. Applicants are hereby adding new claim 21. Support for all amendments is found in the specification as originally filed. Reconsideration of this application as amended, and allowance of all pending claims are hereby respectfully requested.

Information Disclosure Statement

Applicants appreciate the Examiner's consideration of the reference cited in the Information Disclosure Statement filed with the application on November 26, 2003. However, the initialed copy of the form 1449 provided with the present Office Action includes a clerical error. It is noted that the Examiner incorrectly initialed the "Other Art" section instead of the line including the cited reference. Applicants respectfully request that the Examiner provide a corrected form 1449 with a subsequent communication.

Priority Document

In the Office Action, the Examiner acknowledged the Applicants' claim for foreign priority under 35 U.S.C. § 119. Applicants submit herewith a certified copy of Japanese application no. JP2002-346485 to perfect said priority claim.

Rejection under 35 U.S.C. § 102

Claims 1-10 have been rejected under 35 U.S.C. § 102 as allegedly anticipated by Shinomiya et al. (U.S. Patent No. 6,259,901 B1). This rejection is respectfully traversed.

Applicants respectfully request reconsideration and allowance of the claims in view of the following arguments. For at least the reasons stated below, Shinomiya et al. do not disclose or suggest each of the claim elements.

The present invention as recited in claim 1, for example, relates to a current control method in which the amount of current required for an amplifier to operate is varied in response to the *operational frequency* of the amplifier. One advantage of the claimed invention is a reduction in power consumption by changing the bias current in accordance with the operational frequency of an amplifier within the range in which the amplifier maintains its ideal characteristics.

Shinomiya et al. do not disclose or suggest “varying a value of current required for an amplifier to operate, in response to an operational frequency of said amplifier” as recited in independent claim 1. In contrast to the Applicant’s claimed invention, Shinomiya et al. describe a technique for variably adjusting the gain of an amplifier by setting the bias current of the amplifier in accordance with an external gain control signal (see col. 7, lines 57-62). Shinomiya et al. also describe controlling the functionality of the circuit by changing the characteristics of the amplifier. Furthermore, Shinomiya et al. disclose that the bias control circuits 15, 16 perform a temperature compensation function (see col. 8, lines 1-5).

Because Shinomiya et al. fail to disclose each and every element of the claimed invention, it cannot anticipate independent claim 1. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

Similarly, Shinomiya et al. do not disclose or suggest each of the claim elements of independent claims 2 and 3. Claims 2 and 3 relate to a current supply circuit including a current switching means that is responsive to operational frequency. As described above, and in contrast

to the Applicant's claimed invention, Shinomiya et al. describe a technique for variably adjusting the gain of an amplifier by setting the bias current of the amplifier in accordance with an external gain control signal (see col. 7, lines 57-62).

Because Shinomiya et al. fail to disclose each and every element of the claimed invention, it cannot anticipate independent claims 2 and 3 as well as claims 4-10 which depend therefrom. Reconsideration and withdrawal of the rejection are therefore respectfully requested.

New claim 21 is also patentable in view of Shinomiya et al. Support for new claim 21 may be found in the Applicants' specification as originally filed at, for example, page 15, lines 6-8. Shinomiya et al. do not disclose or suggest "varying a value of a current required for an amplifier to operate within a range in which said amplifier maintains its ideal characteristics, in response to an operational frequency of said amplifier when said current is supplied to said amplifier" as recited in claim 21. As described above, and in contrast to the Applicant's claimed invention, Shinomiya et al. describe a technique for variably adjusting the gain of an amplifier by setting the bias current of the amplifier in accordance with an external gain control signal (see col. 7, lines 57-62).

Allowable Subject Matter

Applicants acknowledge with appreciation the indication that claims 11-13 include allowable subject matter and that claims 14-20 are allowed. However, claims 11-13 were objected to as dependent on a rejected base claim. For at least the reasons stated above, the rejected base claim should now be considered allowable in view of the cited reference. Accordingly, it is believed that the objection to claims 11-13 has been overcome. Reconsideration and withdrawal of the objection is respectfully requested.

Conclusion

Accordingly, it is believed that all pending claims are now in condition for allowance. Applicants therefore respectfully requests an early and favorable reconsideration and allowance of this application. If there are any outstanding issues which might be resolved by an interview or an Examiner's amendment, the Examiner is invited to call Applicants' representative at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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IN THE DRAWINGS:

Submitted herewith are five replacement drawing sheets including FIGS. 1-6. The replacement drawing sheets are substantively the same as the original drawing sheets and are being submitted for better reproducibility of the lines and text.